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ORIGINAL ARTICLE

Determinants of organic tunisian purchasing behaviour: an application of the consumption values theory

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Abstract
Based on the theory of consumption values, which include epistemic, social, emotional, conditional, and functional values, this study aims to investigate consumer choice behavior for organic products in Tunisia. Furthermore, it examines the moderating influence of environmental knowledge. Data from 645 Tunisian consumers were analyzed using structural equation modeling. The results revealed that emotional, epistemic, functional value (price), and social values were among the main factors influencing consumer choice behavior. As a moderator, environmental knowledge has a significant effect on the role of epistemic, social, conditional, and emotional values. This contributes to the literature on organic consumer behavior and helps marketers develop new organic strategies to foster organic consumption and increase sales volumes in the Tunisian market.

Keywords Epistemic value · Social value · Emotional value · Conditional value · Functional value · Environmental knowledge

1 Introduction

During the last two decades, organic consumption has increased as consumer awareness has grown (Kushwah et al., 2020; Smriti & Chaman, 2022). This growing demand for organic products has caught the interest of scientific studies, particularly management studies, to explore the determinants of organic consumption (Laura et al., 2021), the main reasons why consumers buy organic products, and the factors that hinder organic purchases. It has been stated that consumers engage in organic consumption to display their dedication to animal and environmental welfare rather than just to meet functional demands (e.g., nutrition and health) (Du et al., 2017).

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According to a recent study by Laura et al. (2021), consumers today are aware of the lower environmental impact of organic products. They even overestimate the health risks of organic consumption, a phenomenon known as "the negative imprint illusion" (Laura et al., 2021). In particular, consumers estimate that the environmental harm of an organic product and a conventional product combined is less than that of a conventional product alone (Laura et al., 2021). Furthermore, according to Klas et al. (2019), consumers combine organic consumption with altruism and social responsibility and often consider organic consumption as driven by altruistic motives and pro-environmental. Although these focused on antecedents positively influencing intentions, they suggested that it is strikingly important to study antecedents driving the choice behavior of organic product buyers (Kushwah et al., 2020). In addition, they argued that, with developed markets now approaching stagnant growth, studies on emerging markets will be the new hotspots for organic consumption (Meier et al., 2020).

This study aims to address the recent calls above by exploring the determinants of Tunisian consumer choice behavior. Although this emerging market is the second largest producer of organic products in Africa (dates, olive oil, aromatics, vegetables, medicinal herbs, and vine plants), its market analysis is weak. Therefore, examining the determinants that drive consumer choice behavior will assist marketers in developing efficient marketing tactics to boost organic product purchases in this emerging market, which is a significant global consumer marketplace with great promise for these products.

According to our knowledge, the Tunisian context has not previously been explored in establishing the relationship between consumption values and consumer choice for organic products. In particular, a moderating variable called "environmental knowledge" was introduced to advance our understanding of consumer choice behavior. Moreover, although some studies in this field have been carried out in other countries, their findings cannot be generalized because consumer consumption patterns for organic products vary across countries (Rozik et al., 2022). In the same way, the results of a particular study will not necessarily be valid indefinitely (Lin & Huang, 2012). Lastly, this study aims to contribute to the knowledge by empirically identifying the Tunisian consumer choice behavior of organic products and promoting further studies in this area, especially as the market for organic products is relatively unexplored.

2 Background and research hypotheses

2.1 The theory of consumption values (TCV)

The concept of perceived value has been considered one of the main predictors of the decision-making process (Zeithaml, 1988). It refers to the overall evaluation of the usefulness of the product concerned, positive or negative (Zeithaml, 1988). Thus, it is considered a trade-off between what consumers give and what they receive in return. However, because of its one-dimensional conceptualization, it has been criticized for being too simple and lacking multidimensionality in the decision-making

process (Sheth et al., 1991). To address this criticism, Sheth et al. (1991) developed the theory of consumption values (TCV), which is based on three main axiomatic propositions (Lin & Huang, 2012):

(1) Consumer choice is determined by multiple consumption values.

(2) In any given choice situation, consumption values make different contributions.

(3) Consumption values are mutually independent.

The TCV maintains that consumer choice is influenced by five consumption values: emotional, epistemic, functional, social, and conditional, which explain why a consumer chooses to purchase or not purchase (or use or not use) a specific product, one type of product over another, and one brand over another (Sheth et al., 1991).

It gained popularity because of its inherent support for its multidimensionality and representation of different consumption values (Kushwah et al., 2020). Scholars have supported it, claiming that a multidimensional view has a better predictive ability to forecast customer buying behavior compared to a unidimensional view (Gonçalves et al., 2016).

Considering the above discussion, this study adopts the TCV to examine the determinants that drive the organic choice behavior of Tunisian consumers.

2.1.1 The emotional value

Emotional value has been defined as "the perceived utility gained from an alternative's capacity to elicit emotions or affective states" (Sheth et al., 1991). This value affects choices because of a product's potential to stimulate emotions that may be associated with its use (Bødker et al., 2009). For example, aesthetics, such as beauty and art, the romance of a candlelight dinner, or the fear evoked by a scary movie can all evoke strong emotional reactions.

According to previous studies, emotional value has a significant and positive effect on consumer choice behavior for green products (Gonçalves et al., 2016; Lin & Huang, 2012). This statement has been proven recently in the context of organic food consumption with empirical data (Kashif et al., 2022; Roh et al., 2022). Purchasing organic instead of conventional food provides consumers with psychological benefits because they crave to do the morally right thing and be better people (Akbar et al., 2019). This leads us to the following hypothesis:

H1 Emotional value has a positive effect on consumer choice behavior for an organic product.

2.1.2 The epistemic value

The epistemic value has been defined as a perceived utility arising from an alternate ability to raise interest, provide novelty, or satisfy a hunger for knowledge (Sheth et al., 1991). With that in mind, Hirschman (1980) demonstrated that when a product can arouse curiosity, introduce novelty, and/or satisfy a desire to know, then this product or brand has epistemic value. However, Lin and Huang (2012) discovered

that consumers may wisely decide to seek out information that is not currently "useful" but may become more important in the future. Furthermore, Kao and Tu (2015) claimed that when consumers watch their favorite celebrities endorse a cosmetic product, they buy it out of curiosity, and thus, the product provides an epistemic value. These authors also pointed out that consumers can only buy products out of curiosity to accumulate useful knowledge or skills to improve various situations. Therefore, purchasers' desire to further differentiate product attributes may influence consumer buying behavior (Tanner & Kast, 2003). In their study in India on consumer behavior, Biswas and Roy (2015) discovered that the epistemic value has a positive effect on sustainable development, whereas this value positively affects purchasing behavior in Portugal (Gonçalves et al., 2016). Lin and Huang (2012) discovered that epistemic value has a significantly positive relationship with consumer choice behavior for green products in Taiwan. Recently, Roh et al. (2022) revealed that consumers' desire to learn more about a product's features can positively affect their green consumption. Therefore, it is possible that in the organic consumption domain, the epistemic value may positively influence consumers to make their choice (Roh et al., 2022). Based on this discussion, the second hypothesis is presented:

H2 The epistemic value has a positive effect on consumer choice behavior for an organic product.

2.1.3 The functional value

The functional value refers to the perceived utility of a product or service to attain utilitarian or physical performances that result from attributes, such as price, durability, and reliability (Sheth et al., 1991). This value is the main factor for consumers who decide to purchase products (Kao & Tu, 2015). It has to do with the tangible benefits of conventional goods and services that perform utilitarian functions based on relatively objective features (Holbrook & Hirschman, 1982). Functional values include communicating the functional benefits of the product or brand, such as superior performance, quality/value, and lower cost/price (Doyle & Stern, 2006). Sweeney and Soutar (2001a, 2001b) divided this value into two factors: price value and quality value. The first one refers to the reference price that customers value when making a purchase decision, whereas the second one refers to features measured on product attributes, i.e., consistent product quality and texture (Yeo et al., 2016).

Lin and Huang (2012) discovered that some consumers are somewhat concerned about environmental deterioration and are willing to pay more for green products. In terms of organic food, Watanabe et al., (2020) confirmed that the price and quality of food products are also critical factors for consumers. Furthermore, Kashif et al., (2022) discovered that functional value positively affects the purchase intention of organic foods among Pakistani consumers. Finch (2005) proved that the functional value (price) affects the purchase of organic products. Recently, Roh et al. (2022) discovered a positive relationship between consumers' attitudes and the functional value of organic products. Based on this, the following are proposed:

H3a The functional value (quality) has a positive effect on consumer choice behavior for an organic product.

H3b The functional value (price) has a positive effect on consumer choice behavior for an organic product.

2.1.4 The social value

Social value is "the perceived utility acquired from an alternative's association with one or more specific social groups" (Sheth et al., 1991). Social value is about the approval and improvement of self-image (Sweeney & Soutar, 2001a, 2001b). According to Pavlou and Chai (2002), customers may believe that their friends, family, colleagues, and others like a given behavior, and this will cause them to be influenced by their beliefs. Consequently, consumers buy products to demonstrate their social class, look for an identity within a social group, respect social norms, and display self-image (Kao & Tu, 2015). Similarly, other studies indicate that when a social value exists in a product and is accepted by society, this product can realize positive or negative social values (Bei & Simpson, 1995; Kao & Tu, 2015). Similarly, Finch (2005) demonstrated that social value influences the behavior of the green consumer. In terms of organic consumption, social value has been explored in the context of organic food consumption in Korea (Woo & Kim, 2019) and Taiwan (Hsu, 2017) and has been considered an essential determinant when making consumption decisions (Roh et al., 2022).

In line with these arguments, the following are proposed:

H4 Social value has a positive effect on consumer choice behavior for an organic product.

2.1.5 The conditional value

The conditional value refers to "the perceived utility acquired by an alternative as the result of the specific situation or set of circumstances facing the choice maker" (Sheth et al., 1991). In general, the utility of the alternative often depends on the situation; for example, some products are associated with "once in a lifetime" events (e.g., a wedding gown), whereas others only have seasonal value (e.g., Christmas cards). In this context and according to Belk (1974), the "situation may be defined as all those factors particular to a time and place of observation which do not follow from a knowledge of personal (intra-individual) and stimulus (choice alternative) attributes, and which have a demonstrable and systematic effect on current behavior." Thus, when the value is strongly associated with the use of the product or service in a precise context, the conditional value appears (Wang et al., 2013). In his study of soft drinks, food snacks, beers, and breath fresheners, Lai (1991) asserted that consumption situations influence behavior and that sales and purchases of products often respond to specific situations. Similarly, according to Lin and Huang (2012), conditional value impacts green consumer behavior. In this context, the conditional value has a positive impact on green

consumption behavior (Biswas & Roy, 2015; Woo & Kim, 2019) and the buying behavior of green products (Gonçalves et al., 2016; Roh et al., 2022).

Therefore, it is logical to expect that conditional value could be an important factor in determining organic choice behavior. Therefore, the following hypothesis is presented:

H5 The conditional value has a positive effect on consumer choice behavior for an organic product.

2.1.6 The moderating role of environmental knowledge

Environmental knowledge is defined as "a general knowledge of facts, concepts and relationships concerning the natural environment and its major ecosystems" (Fryxell & Carlos, 2003). In other words, it represents the current knowledge, or what customers know, about the environment, emotional involvement in environmental issues, awareness of environmental issues, and the effects of human behavior toward the environment (Zhao et al., 2014). Several researchers confirmed that environmental knowledge plays a crucial role in the decision to purchase organic products (Bamberg & Möser, 2007; Mostafa, 2006). For instance, Smith and Paladino (2010) discovered that environmental knowledge will improve attitudes and positive intentions toward organic products. Likewise, Suki (2013) demonstrated that environmental knowledge significantly influences young consumers' buying behaviors for organic foods. More recently, by studying green advertising, Chang and Wu (2015) demonstrated that knowledge influences green behaviors. In the Tunisian context, the study of green consumer behaviors has proved the existence of a significant, positive, and strong link between environmental knowledge and green behaviors (Zaiem, 2005).

Given that environmental knowledge is always considered an essential factor that affects all phases of decision-making processes and the way consumers assess green products and services in the market (Shanyong et al., 2018), the following hypothesis is presented:

H6 Environmental knowledge moderates the relationship between functional value (price and quality) as well as social, conditional, epistemic, and environmental values, and Tunisian consumer choice behavior for an organic product.

To examine the direct causal link between consumption values and consumer choice behavior for organic products on the one hand and the moderating role of environmental knowledge on the other, a conceptual model is developed as shown in Fig. 1.

3 Methods

3.1 Data collection

This study aims to understand consumer choice behavior for organic products. The survey population consisted of Tunisian consumers from the cities of Sousse, Tunis, and Sfax. The selection and choice of these three cities are justified by the

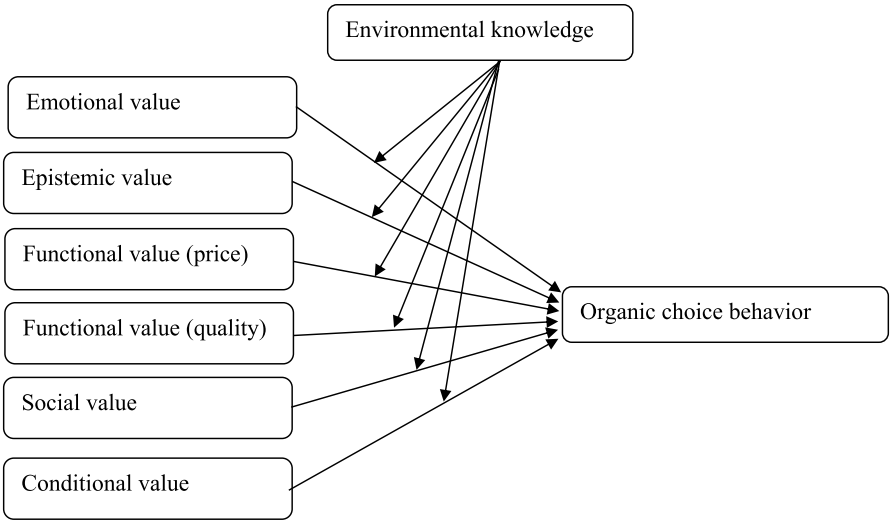

Fig. 1 The research model

fact that they are regarded as the largest cities and have the greatest concentration of retailers carrying organic goods. They also constitute the most important part of Tunisian economic activity, with great socioeconomic diversity.

To evaluate the hypothesized relationship in this study, a structured questionnaire was developed, and a face-to-face interview with a sample of 637 Tunisian respondents was conducted from November 2021 to February 2022 while they were shopping in supermarkets.

Because of the difficulty of conducting such a survey in Tunisia where organic products are relatively new (compared to the European market), a pre-test of a questionnaire that included two questions (What is an organic product? What are the main organic products in Tunisia?) was tested to carefully examine the respondent's abilities and whether they were aware of the existence of organic products on the local market to avoid biased responses.

3.2 Measures

This study used a 5-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The measurement scales include the organic consumption value scale from Lin and Huang (2012), an organic product consumer choice behavior scale from Choi and Kim (2005), and an environmental knowledge scale from Wahid et al. (2011). As a result of a pre-test conducted to verify the psychometric quality of the measurement scales, some indicators of organic consumption

value were eliminated because of their ambiguity. In the end, only 23 measurement indicators were selected to carry out the survey. The set of selected indicators is shown in the Appendix.

3.3 Structural model

Quantitative analyses were conducted using the Amos™ 23 software, which includes a confirmatory factor analysis. This tested the validity and reliability of the measurement model and examined the causal model using structural equations.

The maximum likelihood estimation method was used to estimate the parameters (Chin, 1998a, 1998b; Hair et al., 2011; Kline, 2011). Quantitative analyses were conducted using the SPSS Amos™ 23 software.

4 Results

4.1 Descriptive statistical analysis of the sample

Based on Table 1, the 637 consumers participating in the survey had the following characteristics:

- The proportion of females (68.8) was higher than that of males (31.2), indicating that women are more concerned about environmental issues than men (Lee, 2009), and most of the buying decisions for home products are made by women in Tunisia (Abdmouleh, 2007).
- Almost three participants out of four fall within the age range of 20–39 years.
- The same proportion had a university education.

Table 1 Sample sociodemographic indicators (N = 637)

Characteristics	Category	Frequency	(%)
Gender	Female	438	68.8
	Male	199	31.2
Age	≤ 20	8	1.3
	20–29	195	30.6
	30–39	305	47.9
	40–49	89	14
	≥ 50	40	6.3
Education	Primary school	1	0.2
	Secondary school	130	20.4
	Undergraduate	344	54
	Master or above	162	25.4

These features are explained by the fact that these categories are the most engaged in ecological research and investment (Van and Dunlap, 1981).

4.2 Reliability and validity of constructs

First, Cronbach's alpha was used to measure the internal consistency and reliability of the scales, whereas the average variance extracted (AVE) was used to test the convergent validity of the measurement model. As shown in Table 2, all Cronbach's alpha values greater than the threshold value of 0.7 attest to the high internal consistency and validity of the results, whereas the AVE values lower than the Cronbach's alpha values confirm that the criterion of convergent validity is respected for all constructs (Tavakol & Dennick, 2011).

4.3 Structural equations for testing the causal model

A structural model was evaluated to test the fit of the overall model and the research H1–5 (Hoyle, 1995). At this level, the moderating influence of environmental

Table 2 Factor analysis: standardized factor loading (λ), Cronbach's alpha, and AVE

Variable	Item	(λ)	Cronbach's alpha	AVE
Organic choice behavior	OCB1	0.69	0.8	0.51
	OCB2	0.75		
	OCB3	0.74		
	OCB4	0.67		
Social value	SV1	0.72	0.79	0.56
	SV2	0.82		
	SV3	0.70		
Emotional value	EV1	0.81	0.81	0.69
	EV2	0.83		
	EV3	0.68		
Functional quality	FVQ1	0.81	0.8	0.67
	FVQ2	0.82		
Functional price	FVP1	0.77	0.8	0.58
	FVP2	0.82		
	FVP3	0.67		
Epistemic value	EP1	0.84	0.81	0.68
	EP2	0.81		
Conditional value	CV1	0.73	0.79	0.56
	CV2	0.67		
	CV3	0.83		
Environmental knowledge	EK1	0.74	0.8	0.60
	EK2	0.78		
	EK3	0.81		

knowledge was not measured. To achieve this, indices, such as CMIN/DF, CFI, IFI, TLI, PGFI, and RMSEA were selected. In general, Normed $\chi 2$ (CMIN/DF) between 1 and 3; CFI, IFI, and TLI are greater than 0.9, PGFI is greater than 0.5, and RMSEA is less than 0.08; these are the fitting degree criteria of the overall model (Hu & Bentler, 1999).

The structural model of this study shows the following indices: Khi2 (CMIN/DF = 2.901), (CFI = 0.939, IFI = 0.940, TLI = 0.923, PGFI = 0.666, RMSEA = 0.057), indicating that the fitting degree of this research model was significant.

To test the hypotheses, standardized regression coefficients were calculated. Table 3 shows the results of the standardized coefficients at values $p < 0.00$, $p < 0.001$.

The results show that four hypotheses were supported (H1, H2, H3b, and H4). Emotional value ($\beta = 0.140$, $p < 0.00$), epistemic value ($\beta = 0.179$, $p < 0.00$), functional value price ($\beta = 0.084$, $p = 0.001$), and social value ($\beta = 0.204$, $p < 0.00$) have a positive influence on consumer choice behaviors for organic products. However, H3a and H5 were not supported. The association between functional value quality ($\beta = -0.127$, $p < 0.00$), conditional value ($\beta = -0.057$, $p < 0.00$), and consumer choice behavior of organic products was found to be negative.

4.4 Multiplegroup analysis: moderating role test of environmental knowledge

In a subsequent step of the analysis, the moderating influence of environmental knowledge is examined using a multigroup structural equation model (Byrne, 2001).

To understand the moderating influence of environmental knowledge, the entire sample was divided into two subsamples, that is, those with high and low environmental knowledge, and a median split procedure was used (Brochado et al., 2017).

The unconstrained structural multigroup model fit was examined to establish causality: Khi2 (CMIN/DF = 2.061), (CFI = 0.94, IFI = 0.90, TLI = 0.91, PGFI = 0.607, RMSEA = 0.056). This indicates that all the values are within the recommended tolerable levels.

Considering the high environmental knowledge subgroup, functional value, related to both price and quality, was confirmed to not affect organic choice, and all other coefficients (emotional, epistemic, social, and conditional values) maintained

Table 3 Structural model regression weights

Path		Regression	Hypothesis decision
H1	Emotional <–> organic choice	0.140**	Supported
H2	Epistemic <–> organic choice	0.179 **	Supported
H3a	Functional Q <–> organic choice	−0.127**	Not supported
H3b	Functional P <–> organic choice	0.084*	Supported
H4	Social value <–> organic choice	0.204 **	Supported
H5	Conditional value <–> organic choice	−0.57**	Not supported

** = $p < 00$, * = $p < 0.001$

a high statistical significance and even increased in the case of the latter. In contrast, all relationships were insignificant when environmental knowledge was low ($p > 0.10$). Like in the above model, the conditional value has a negative effect, with an even more significant coefficient.

Table 4 shows the standard errors of the coefficients. Each relationship is substantially lower for the high knowledge subset than for the low knowledge one, indicating that the relationship between values and behavior is not only stronger but also more stable in the first situation.

Therefore, for all values proving to affect consumer choice behavior, significant interaction effects with environmental knowledge appear, confirming their moderator effect, as in H6.

5 Discussion and implications

This study primarily aims to understand which factors and to what extent influence the Tunisian consumer choice behavior for organic products. In particular, this study was conducted by analyzing the TCV and consumer choice behavior for organic products in emerging markets in response to recent calls to investigate the antecedents driving the choice behavior of organic products (Kushwah et al., 2020). The results revealed that emotional value has a positive effect on consumer choice behavior for organic products, emotions are an integral part of human life, and Tunisian consumers rely on them during the decision-making process. Functional value price has a positive effect on consumer choice behavior for organic products. This finding may be related to Tunisian consumers' higher levels of price sensitivity when purchasing organic goods. Another reason may be related to the Tunisian economy, which is experiencing high inflation, depression increase, and stagflation; consumers are more concerned with prices than those who live in other countries with stable economies. It also means that Tunisian consumers prefer to buy organic products, given their responsibility and obligation to preserve the environment. Therefore, the environmental impacts of conventional products made them aware of the importance of adjusting their tastes for the greater good of their society. The results also revealed

Table 4 Unconstrained structural two-groups model regression weights

	High knowledge		Low knowledge	
	Standardized estimate	*P*	Standardized estimate	*P*
Emotional—) organic choice	. 728	.00	.39	.177
Epistemic—) organic choice	. 329	.00	. 703	.102
Functional P—) organic choice	− . 158	.113	.040	.266
Functional Q—) organic choice	− . 072	.492	− .003	.739
Social value—) organic choice	.708	.00	.59	.450
Conditional—) organic choice	− . 850	.00	− 1.08	.309

that social value has the strongest effect on consumer choice behavior for organic products. It may reflect that Tunisian consumers pay particular attention to social status and self-image Bearing in mind the strong and positive effect of social value on consumer choice behaviors, the advertising messages of organic products should consider the social needs of Tunisian consumers. The managers should encourage the advertising of organic consumption by using various types of media, such as television, radio, and the Internet, to raise the level of social value among Tunisian consumers. However, the conditional value has a negative impact on organic consumer choice behavior. A possible interpretation of this negative coefficient stands in the early stage of development of the Tunisian organic products market, where ethically motivated early adopters unconditionally adhere to organic-labeled products (Tagbata & Sirieix, 2008).

5.1 Theoretical implications

This study has three major theoretical implications. First, this study extends the literature on the application of the TCV in the context of organic products by providing novel insights from a new market, which is a significant consumer marketplace in the Mediterranean area with a lot of promise for these products. The novelty of this study lies in the examination of the interaction between different consumption values and consumer choice behavior for organic products, which is a unique contribution to consumer behavior literature. Second, this study is among the first and only empirical studies that have explored the application of the TCV in the less-studied Arabic cultural context of organic product consumers, i.e., Tunisian consumers. Third, it sheds novel light by exploring the moderating role of consumer environmental knowledge in consumer choice behavior.

5.2 Managerial implications

This study provides significant practical implications for both marketers and policymakers. First, consumption values turn out to be a relevant element of organic product choice behavior among buyers and non-buyers. Thus, marketers and policymakers should develop strategies to reinforce consumer values related to the consumption of organic products. This could be accomplished by creating a brand campaign focused on consumer education. In other words, knowledge considerably affects consumer choice behavior and organic consumption. Therefore, managers could create a campaign with an emphasis on deepening the current understanding of the purchasers and a focus on persuading those who are not already buying to do so by offering relevant information. Furthermore, managers need to carefully consider the pricing strategy because higher prices can lead to negative attitudes toward organic products, preventing the Tunisian organic market from developing. This study also has implications for multinational companies trying to enter Tunisia. Such companies can understand contemporary consumption behavior and adopt an effective organic strategy that allows them to guarantee good segmentation and the best positioning parallel to the conventional product. Furthermore, they can use the

results to reach their target audience in a market at an early stage of their development. Tunisians are concerned about the state of the environment, but at the same time, they are not ready to change their consumption behavior. This study provides interest in improving consumer choice and adoption of organic products.

5.3 Limitations and areas for future research

Although this study attempted to draw a sample that could best represent Tunisian consumers, it was limited to three Tunisian cities. Extending the study to other provinces and cities, as well as rural populations, would contribute to a broader and deeper understanding of customer purchasing behavior for environmental products. Another limitation of the current study was that the investigation was related to organic products in general. However, organic choice behavior may vary across different product categories. Future studies may focus on specific product categories within organic products and assess their relationship with consumer choice behavior because the literature suggests that differences exist, and such information is significant to marketing strategies. Although this study shows that conditional value has a negative impact on consumer choice behavior, further and more detailed specifications of these variables might help identify the root of this effect. For further scope, a comparative study on two or more different countries is suggested to better understand the underlying differences based on consumer values among buyers and non-buyers. Lastly, future studies should examine the moderating role of variables such as place of purchase (supermarket shoppers, community-focused shoppers, online shoppers, or specialty store shoppers), purchase frequency (occasional, regular, or non-regular shoppers), and notoriety (unaware, aware non-buyers, or informed buyers).

Appendix

Organic consumer choice behavior
OCB1 I make a special effort to buy paper and plastic products that are made from recycled materials
OCB2 When I have a choice between two equal products, I purchase the one less harmful to other people and the environment
OCB3 I have avoided buying a product because it had potentially harmful environmental effects
OCB4 I make a special effort to buy household chemicals such as detergents and cleansing solutions that are environmentally friendly
Organic consumption value
Social value
SV1 Buying the organic product would help me to feel acceptable
SV2 Buying the organic product would improve the way that I am perceived
SV3 Buying the organic product would give its owner social approval
Emotional value

EV1 Buying the organic product instead of conventional products would feel like making a good personal contribution to something better
EV2 Buying the organic product instead of conventional products would feel like the morally right thing
EV3 Buying the organic product instead of conventional products would make me feel like a better person
Functional
Value- quality
FVQ1 The organic product is well made
FVQ2 The organic product has an acceptable standard of quality
Value- price
FVP1 The organic product is reasonably priced
FVP2 The organic product offers value for money
FVP3 The organic product would be economical
Epistemic value
EP1 Before buying the product, I would obtain substantial information about the different makes and models of products
EP2 I would acquire a great deal of information about the different makes and models before buying the product
Conditional value
CV1 I would buy the organic product instead of conventional products under worsening environmental conditions
CV2 I would buy the organic product instead of conventional products when there are discount rates for organic products or promotional activity
CV3 I would buy the organic product instead of conventional products when organic products are available
Environmental knowledge
EK1 I know how to preserve and not cause damage to the environment
EK2 I know that plastic bags take many years to decompose and cause pollution
EK3 I know the causes and effects of "global warming."

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